

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

November 7, 2006

JK

TO: Internal File

THRU: Wayne H. Western, Team Lead *WHW*

FROM: Priscilla Burton, CPSSc, Environmental Scientist III *PWB by an*

RE: Installation of Ventilation Shaft/Blowing Fan, Andalex Resources Inc.,
Centennial Project, Permit C/007/0019, Task ID #2679

SUMMARY:

In an application received October 25, 2006, the immediate need for a ventilation fan shaft is described. An excavation of 15 ft of earth is required to reach bedrock before boring a shaft for the ventilation fan within the existing disturbed area. The material will be stockpiled in the immediately vicinity and then bermed around the shaft during operations. There is no change to the environmental soils information or the soils operation plan. There are only changes to the engineering and reclamation plans.

TECHNICAL MEMO

TECHNICAL ANALYSIS:

OPERATION PLAN

RECLAMATION PLAN

MINE OPENINGS

Regulatory Reference: 30 CFR Sec. 817.13, 817.14, 817.15; R645-301-513, -301-529, -301-551, -301-631, -301-748, -301-765, -301-748.

Analysis:

Backfilling of the 370 ft. X 16 ft shaft will require 5,920 cu ft of fill if none is lost to the void. This translates to 219 cu yds. The Permittee calculated 2,755 cu yds, which allows for twelve times the volume of the cylinder created. This fill will be imported. The imported material must be analyzed for acid/toxic parameters (particle size analysis, pH, EC, SAR, Se, B, acid/base accounting) prior to placement as backfill in the borehole, as per R645-301-542.700 and according to the Division's Topsoil and Overburden guidelines.

Findings:

R645-301-542.700, The imported material must be analyzed for acid/toxic parameters (particle size analysis, pH, EC, SAR, Se, B, acid/base accounting) prior to placement as backfill in the borehole, as per R645-301-542.700 and according to the Division's Topsoil and Overburden guidelines. [PWB]

RECOMMENDATIONS:

Please request that the Rule cited above is addressed prior to approval.